AMENDMENTS TO THE CLAIMS

1.   (currently amended)   A method for providing Internet Protocol communication services in a communication network, the method comprising:

detecting a communication session associated with a client device on a first network device;

sending a first message from the first network device to a second network device, the first message comprising a registration request;

determining on the second network device a network address of a third network device for providing communication services for the communication session associated with the client device;

sending a first response message from the second network device to the first network device, the first response message comprising a registration reply message including the network address of the third network device; and

establishing a communication session between the client device and the third network device specified in the first response reply-message, the third network device arranged to provide communication services to the client network-device.

2.   (original)   The method of claim 1, wherein the client device comprises a mobile Internet Protocol client device, the first network device comprises a radio node entity, the second network device comprises a control node entity, and the third network device comprises a foreign agent.

3.   (original) The method of claim 1, wherein the Internet Protocol communication services comprise mobile Internet Protocol communication services or simple Internet Protocol communication services.

4.   (currently amended) The method of claim 1, wherein the step of determining the network address of the third network device comprises:

determining whether the client device is a registered client device; if so,

retrieving a client device record to determine a network address of a network device arranged to provide Internet Protocol communication services to the client device;

retrieving a first network device configuration record comprising at least one network address of at least one network device for providing Internet Protocol communication services to client devices;

determining whether the first network device configuration record comprises the network address of the network device specified in the client device record; and if so,

sending the first ~~reply~~ response message comprising the network address of the network device specified in the client device ~~configuration~~ record.

5.   (currently amended) The method of claim 4, wherein if the client device is not ~~the~~ a registered network device:

retrieving the first network device configuration record comprising the at least one network address of the at least one network device for providing Internet Protocol communication services to client devices;

retrieving a status information record for each of the at least one network device arranged to provide Internet Protocol communication services to client devices, the status information record comprising at least one load factor associated with the network device in the record; and

determining a network address of a network device for providing Internet Protocol communication services to the client device based on the at least one load factor associated with the network device and at least one threshold value associated with the at least one load factor.

6.　(original)　The method of claim 5, wherein the at least one load factor comprises a call load factor, a processing power load factor, or a memory load factor.

7.　(original)　The method of claim 1, further comprising:

receiving on the second network device at least one status information message from at least one network device arranged to provide Internet Protocol communication services to client devices, the at least one status information message comprising at least one load factor associated with a network device sending the at least one status information message; and

creating at least one status information record upon receiving the at least one status information message from the at least one network device.

8.　(original)　The method of claim 7, wherein the at least one status information message is received periodically from the at least one network device arranged to provide Internet Protocol communication services to the client devices.

9. (currently amended) The method of claim 1, further comprising:

receiving a second message from the third network device ~~for providing Internet Protocol communication services to the client device~~, the second message comprising a request for authentication data of the client device;

retrieving a client device record on the second network device;

determining whether the client device record comprises the authentication data of the client device; if so,

sending a second ~~reply~~ response message to the third network device, the second ~~reply~~ response message comprising the authentication data of the client device.

10. (currently amended) The method of claim 1, further comprising:

receiving a first registration update message from the third network device on the second network device;

determining whether the third network device is a network device last serving the client device based on a client device record; if not,

sending a second registration update message from the second network device to the network device last serving the client device; and

terminating a communication link associated with the client device on the network device last serving the client device responsive to receiving the second registration update message from the ~~control node~~second network device.

11.   (original) A method for providing Internet Protocol communication services in a communication network, the method comprising:

receiving a registration request message from a radio node on a control node, the registration request message comprising a request to register a mobile client detected on the radio node with a foreign agent;

determining whether the mobile client is associated with at least one active communication session; if so,

determining a last serving foreign agent associated with the mobile client;

determining whether the last serving foreign agent is available and associated with the radio node; and, if so,

sending a registration reply message from the control node to the radio node, the registration reply message comprising a network address of the last serving foreign agent.

12.   (currently amended) The method of claim 11, further comprising:

determining on the control node a new foreign agent for the mobile client if the last serving foreign agent is not available or not associated with the radio node;

sending a registration reply message from the control node to the radio node, the registration reply message comprising a network address of the new foreign agent;

sending a registration update message from the control node to the last serving foreign agent; and

terminating at least one communication session associated with the mobile client on the last serving foreign agent responsive to receiving the registration update message on the last serving foreign agent.

13.   (original)   The method of claim 12, wherein the step of determining the new foreign agent comprises:

retrieving a radio node record comprising a plurality of foreign agents;

retrieving a status information record for each of the plurality of foreign agents, the status information record comprising at least one load factor associated with the foreign agent in each status information record; and

determining the new foreign agent based on the at least one load factor in each status information record for each of the plurality of foreign agents.

14.   (original)   The method of claim 13, wherein the at least one load factor comprises a call load factor, a processing power load factor, a memory usage factor, or an aggregate call throughput factor.

15.   (currently amended)   The method of claim 13, further comprising:

receiving the at least one load factor ~~form~~ from the plurality of foreign agents on the control node; and

creating the status information record for each of the plurality of foreign agents responsive to receiving the at least one load factor on the control node.

16.   (currently amended)   The method of claim 11, wherein the mobile client comprises a mobile Internet Protocol client, and the radio node comprises a Base Station Control node, a Packet Control Function node, or a Radio Network node.

17.   (currently amended)   An Internet Protocol working device for providing Internet Protocol communication services to mobile client devices, the device comprising:

a central processing unit;

a first interface for communicating with at least one radio node, the first interface for receiving a registration request message from a radio node upon detecting a communication session associated with a mobile client on a-the radio node;

a second interface for communicating with a plurality of network device-devices comprising a plurality of foreign agents, the second interface for receiving load status information data and mobile client information data from the plurality of network devices comprising the plurality of foreign agents;

at least one memory unit for storing the mobile client information data and the load status information data; and

a computer readable medium comprising a first set of instructions executed by a computer for processing the registration request message from the radio node responsive to receiving the registration request message from the radio node and for generating a registration reply message comprising a network address of at least one of the plurality of network devices comprising the plurality of foreign agents;

wherein the network address specified in the registration reply message is determined using a second set of instructions for selecting network devices comprising foreign agents upon receiving registration request messages from the at least one radio node, the second set of instructions arranged to use the client device information data and the load status information data stored in the at least one memory unit.

18. (original) The Internet Protocol working device of claim 17, wherein the Internet Protocol communication services comprise mobile Internet Protocol communication services or simple Internet Protocol communication services.

19. (original) The Internet Protocol working device of claim 17, wherein the at least one radio node communicating with the Internet Protocol working device via the first interface comprises a Base Station Controller node, a Packet Control Function node or a Radio Network Node.

20. (original) The Internet Protocol working device of claim 17, wherein the second set of instructions is used to determine the network address in the registration reply message based on mobile session information data associated with the client device detected on the radio node, the mobile session information data comprising the network address of the network device arranged to provide Internet Protocol communication service to the client device.

21. (original) The Internet Protocol working device of claim 17, wherein the at least one memory unit further comprises at least one load threshold level, the second set of instructions using the load status information data and the at least one threshold level to determine the network address specified in the registration reply message.

22. (currently amended) The Internet Protocol working device of claim 21, wherein the at least one memory unit further comprises at least one configuration record for the at least one radio node, the at least one configuration record comprising at least one network address associated with at least one network device comprising foreign agents arranged to provide Internet Protocol communication services to the at least one radio node in the at least one configuration record, and the second set of ~~instruction~~ instructions using a configuration record of the radio node associated with the registration request message, the at least one threshold level and the load status information data of the at least one network device specified in the configuration record of the radio node to determine the network address specified in the registration reply message.

23. (original) The Internet Protocol working device of claim 17, wherein the mobile session information data stored in the at least one memory unit comprises authentication data associated with client devices.

24. (currently amended) The Internet Protocol working device of claim 23, further comprising:

a third set of instructions for processing a registration request message comprising an authentication data request for authentication data of the client device from the network device determined using the second set of instructions and generating a registration reply message comprising authentication data of the client device if the mobile session information data comprise comprises the authentication data of the client device.

25. (currently amended) The Internet Protocol working device of claim 17, wherein the second set of instructions is arranged to determine whether the network address specified in the registration reply message is associated with a network address of a last serving network device associated with the client device, and send a registration update message to the last serving network device is if the network device in the registration reply message is not associated with the network address of the last serving network device.

26. (original) The Internet Protocol working device of claim 25, wherein the registration update message comprises a request to terminate at least one communication session associated with the client device on the last serving network device.

27. (original) The Internet Protocol working device of claim 17, wherein the first interface and the second interface include a software interface or a hardware interface.